

# Corona

*Department of Water and Power*

## ***Consumer Confidence Report***

# **2003**

**For Year 2002**

## Message From the General Manager

In December 2002, the City of Corona Utilities Department officially changed its name to the Department of Water & Power. This change was to reflect the growing delivery of electrical services provided by the Department. Along with the name change, the Department made several structural changes to the organization that included the reorganization and relocation of the Utility Billing Division from the Finance Department to the Department of Water & Power as well as the implementation of finance, purchasing and human resources functions relative to the Department. The intent is to provide administrative support that is focused on service needs to support water, wastewater and power issues.

This year will be another stellar year for the community and the Department. The 10-million gallon per day Temescal Desalter desalination plant is on-line producing better quality water for the community. The second phase will produce an additional 5 million gallons per day and is projected to be on-line in September, 2003. The Desalter improves the quality of our water, helps stabilize our rates and reduces our reliance on imported water from Northern California and the Colorado River.

Wastewater Treatment Plant #3 has been on-line for over one year. This state-of-the-art facility, using the latest microfiltration technology, serves the Temescal Canyon area. The plant produces reclaimed water, which is used to irrigate Eagle Glen Golf Course and City parks in the area. Several state and local agencies, such as the Department of Health, regulate the use of reclaimed water.

The success of our wastewater treatment program has opened new avenues for the City in the area of recycled water. The City is receiving \$25 million in a grant loan program to construct three reservoirs and over 27 miles of pipeline to serve recycled water for irrigation purposes to approved customers. This project will further reduce our demand for expensive imported water and help stabilize our water rates.

The City Corporation Yard is now complete and operational. The City's field staff is sharing over 200,000 square feet of space consisting of a centralized warehouse, vehicle maintenance, vehicle fuel (including natural gas fuel for the general public), City shops, training centers, shooting range for the Police, and field offices. The corporation complex has reduced the City's operating

costs by enabling City's crews to more readily share equipment and ideas.

The Department's new Power Division continues to assist the business community and the City's departments in reducing electrical costs. The City formed the Municipal Electric Utility in the Spring of 2001. The Utility is a registered Electric Service Provider (ESP) providing energy services to 53 Corona businesses, the City's municipal load, as well as Los Angeles Unified School District facilities in SCE's territory. Customers of the Utility have saved more than \$1,000,000 in energy costs since September 2001. The Utility recently energized the Crossings Business Center in South Corona where the Department provides bundled electric distribution service to customers. The Department is developing similar "full requirements" electric distribution service to other greenfield areas as they develop. Customers in newly developed greenfield areas pay electric rates 10% below what they would otherwise pay.

Additionally, the region is suffering through a sludge disposal crisis (sludge is a by-product of wastewater treatment). The City has taken two issues and turned them into one cost effective solution; that is, building a small power plant that produces electrical energy and waste heat that can be used to dry sludge. The waste heat from the nominal 30 megawatt Clearwater Cogeneration Power Plant will dry the City's sludge to a fraction of its original volume while at the same time producing a class "A" sludge that is safe to use as a fertilizer or that can be disposed of more easily. Cost savings resulting from lower sludge disposal rates and energy costs will be passed on to the City's customers to help reduce costs within the City's operational budget.

The City is well underway with the New City Hall Project. The Project consists of 147,000 square feet of office space, a Central Plant, and a Day Care Facility. A Veteran's War Memorial is currently being planned to be constructed in the open space of the City Hall "Civic Center Campus" located between the City Hall, Police station, County building and gymnasium. Staff is expected to move into the new facility in May of 2004.

The Department is constantly seeking ways to better serve the City and its customers, improve the quality of our water, improve our local environment, and reduce operational costs. If you have any concerns or suggestions, please call me at (909) 736-2263.

## Informed Customers

Last year, as in years past, your tap water met all EPA and State drinking water health standards. The City of Corona vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies.

## Recycled Water

Most people take it for granted that there will always be enough water. Every time we turn on the tap or a sprinkler, water flows without interruption. The reality for California is that there is not enough water for everyone. The state and our own region are dealing with a growing population, stricter environmental constraints on how water is used and periodic droughts that will curtail unlimited use of our water supplies.

To save the use of drinking water for other uses, the City of Corona has introduced a new source of water called "recycled water". It is high quality water that is repurified from the City's own wastewater treatment plants and is used for landscape irrigation. It allows the City to save drinking water supplies for homes and businesses.

Hundreds of communities in California and around the nation are already using

recycled water to irrigate parks, greenbelts, school grounds, freeways and golf courses.

Recycled water has its own system of pipelines that are completely separate from drinking water lines. These pipelines are always colored purple to distinguish them from drinking water systems. They carry recycled water from the treatment plant to various landscape customers throughout the City.

With a drought-proof supply of locally controlled water, Corona's future looks bright. The City can continue to grow and prosper knowing that an adequate supply of water will be available for its residents and businesses. Local parks and landscaped areas will stay lush and green throughout the year, making Corona an attractive community for its citizens to live in and work.

## Conservation Programs

In Southern California water conservation has become a way of life. You can help stretch our existing supplies by conserving water inside and outside your home. Here are some suggestions of how you can make a big difference with a little effort:

### Outside your home

Did you know that 60% of the water we use is outside the home?

- Use native and drought tolerant plants in your landscape. These plants use less water than turf and can add more interest to your landscape.
- Water your lawn in the early morning; it is cooler and less windy.
- Pay attention to your sprinkler system. Is water running down the sidewalk? Not only is that a waste of water & money, it can create a dangerous situation.

- Put a layer of mulch around trees and plants. Chunks of bark, peat moss, or gravel slows evaporation.
- Don't let the hose run while washing your car.
- Sweep your driveway or sidewalk instead of washing it down with a hose.

### Inside your home

- If you haven't already, install water saving fixtures and appliances in your home such as: low-flow toilets, showerheads, and clothes washers.
- Fix leaks right away. A running toilet can waste up to 60 gallons of water a day.
- Run only full loads in the washing machine and dishwasher.

For more tips visit our website at [www.coronautilities.org](http://www.coronautilities.org).

## Corona's Water Sources

In 2002, Corona residents and businesses used 13 billion gallons of water.

48% of the Water used was pumped from ground water wells owned and operated by the City. Another 41% came from the Colorado River by way

of the California Aqueduct and Lake Matthews. The final 11% came from Northern California, by way of the State Water Project. In order to provide Corona residents with the highest quality water, while maintaining fiscal responsibilities, one or all three sources can be delivered to any part of the service area depending on the demands and the season.

## Water Treatment

The water from the Colorado River must be treated to remove harmful organisms before it is delivered to your tap. This is done at the City's two treatment facilities, the Sierra Del Oro and Lester Water Treatment Plants. The treatment process involves adding coagulants which make

the harmful organisms and very fine particles stick together and become big enough to be removed by filtration, then disinfecting your water with chlorine and ammonia. In independent laboratory testing, 100% of the samples taken in 2002 were free of harmful organisms.





## Blending

You will notice in the tables of detected contaminants that the Groundwaters exceed the primary standard for Fluoride, Nitrate, and Total Nitrogen. The unregulated chemicals Boron and Perchlorate are also exceeding their action levels. The City of Corona is required by law to report the highest level detected in the SOURCES of water and then the AVERAGE concentration delivered to your tap. The averages are much lower because the City of Corona blends water from several

sources to meet water quality standards and an ever increasing demand. The blending stations are continuously monitored and routinely sampled to ensure that the water delivered to your tap meets all health standards with a safety margin of no less than 10%. For more information on the continuing efforts to determine the health effect and establish standards for contaminants such as Perchlorate visit [www.dhs.ca.gov/ps/ddwem](http://www.dhs.ca.gov/ps/ddwem) or [www.epa.gov/safewater](http://www.epa.gov/safewater)

## Nitrates

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels

above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

## Primary Standards

CLARITY (NTU)	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]			State Project Water
<b>Combined Filter Effluent Turbidity (a)</b>	NTU	0.3 & 95	NS	High %<0.5	Metropolitan Water District Henry J. Mills Water Treatment Plant	0.1 100%
<b>Combined Filter Effluent Turbidity (a)</b>	NTU	0.3 & 95	NS	High %<0.5	City of Corona, Lester & Sierra Del Oro Water Treatment Plants	- -
MICROBIOLOGICAL (CFU/100mL)						Ground Water
<b>Total Coliform Bacteria (b)</b>	(b)	5.0%	(0)	Low High Avg	Distribution-System-Wide Low: 0% Distribution-System-Wide High: 0% Distribution-System-Wide Avg: 0%	0% 0% 0% ND 0.12% 0.02%
<b>Fecal Coliform and <i>E. Coli</i></b>	(c)	(c)	(0)	Low High Avg	Distribution-System-Wide Low: 0 Positive Samples Distribution-System-Wide High: 0 Positive Samples Distribution-System-Wide Avg: 0 Positive Samples	0% 0% 0%

**Public Health Goal (PHG):** The level of a contaminant in drinking water which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant allowed in drinking water. Primary MCL's are set as close to the PHG's as economically or technologically feasible. Secondary MCL's are set to protect odor, taste and appearance of drinking water.

**Primary Drinking Water Standard:** MCL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the U.S. Environmental Protection Agency.

**Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.



# Mandatory Health-Related Standards Established by the State of California Department of Health Services

Colorado River Water	Major Sources in Drinking Water	Health Effects Description
<div> <div>-</div> <div>0.15</div> <div>100%</div> </div>	Soil runoff	Turbidity has no health effects. However, high levels can interfere with disinfection and provide a medium of microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
<div> <div>NA</div> <div>NA</div> <div>NA</div> </div>	Naturally Present in the Environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
<div> <div>NA</div> <div>NA</div> <div>NA</div> </div>	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

**Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U.S. Environmental Protection Agency.

## Footnotes

- The turbidity level of the filtered water shall be less than or equal to .5NTU in 95% of the measurements taken each month and shall not exceed 5.0 NTU at any time. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Monthly turbidity values are listed in the **Secondary Standards** section.
- Total Coliform MCLs: (systems that collect  $\geq 40$  samples/month) no more than 5.0% of monthly samples may be positive; (systems that collect  $< 40$  samples/month), no more than 1 positive monthly sample.
- Fecal Coliform and E. Coli MCL: The occurrence of 2 consecutive total coliform positive samples, one of which contains fecal coliform/E. Coli constitutes an acute MCL violation. The MCL was not violated in 2002.

# Primary Standards

## Radioactive Contaminants

[Analyzed every four years (sampled from April 2000 to July 2002)]

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water	Health Effects Description
<b>Gross Alpha Particle Activity</b>	pCi/L	15	NS	Low High Avg	ND 8.5 ND	ND 2.1 ND	2.8 10 5.7	Erosion of natural deposits	Certain minerals are radioactive and may emit forms of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Gross Beta Particle Activity</b>	pCi/L	50	NS	Low High Avg	NC NC NC	ND 4.3 ND	ND 8.1 5.8	Decay of natural and manmade deposits	Combined Radium and Uranium are radioactive and may emit forms of radiation know as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Combined Radium (d)</b>	pCi/L	5	NS	Low High Avg	NC NC NC	0.6 2.1 1.2	ND 1.7 0.7	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Uranium</b>	pCi/L	20	0.5	Low High Avg	ND 8.5 2.4	ND ND ND	ND 3.8 2.4	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

## Footnotes

- (d) MWD results are for 1998/99 4-quarter monitoring program except for gross alpha and uranium Colorado River water where there is monthly monitoring.
- (e) Aluminum and MTBE have both primary and secondary standards.
- (g) State MCL is 45 mg/L as Nitrate, which equals 10.16 mg/L as Nitrogen.



## Inorganic Chemicals

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water	Health Effects Description
<b>Aluminum [AL] (e)</b>	ppb	1000	N/A	Low High Avg	ND ND ND	ND ND ND	ND 63 ND	Erosion of natural deposits; residue from some surface water treatment processes	Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.
<b>Arsenic [AS]</b>	ppb	50	N/A	Low High Avg	ND 4.1 ND	ND ND ND	ND 3.2 2.4	Erosion of natural deposits; glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.
<b>Barium [Ba]</b>	ppm	1	(2)	Low High Avg	ND 0.13 ND	ND ND ND	ND ND ND	Discharge from oil drilling wastes and metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.
<b>Fluoride [F]</b>	ppm	2	1	Low High Avg	0.30 3.1 ND	ND 0.1 0.1	0.3 0.3 0.3	Erosion of natural deposits; water additive that promotes strong teeth	Some people who drink water containing flouride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing flouride in excess of the State MCL of 2 mg/L may get mottled teeth.
<b>Nitrate [NO3] (g)</b>	ppm	45	45	Low High Avg	ND 100.0 35.2	ND 5.7 3.1	ND ND ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.
<b>Nitrate + Nitrite as Nitrogen</b>	ppm	10	10	Low High Avg	2.0 18.0 4.8	ND 1.3 0.7	ND ND ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.

## Volatile Organic Chemicals (mg/L)

<b>Methyl-tert-butyl ether [MTBE] (e)</b>	ppb	13	13	Low High Avg	ND ND ND	ND 2.1 0.7	ND ND ND	Leaking underground tanks; discharge from petroleum and chemical factories	Some people who use water containing methly-tert-butyl ether in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Tetrachloro ethylene [PCE]</b>	ppb	5	0.06	Low High Avg	ND 1.1 ND	ND ND ND	ND ND ND	Discharge from factories, dry cleaners and auto shops	Some people who use water containing tetrachloroethylene in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.
<b>Trichloro ethylene [TCE]</b>	ppb	5	0.8	Low High Avg	ND 4.4 0.1	ND ND ND	ND ND ND	Discharge from metal degreasing sites and other factories	Some people who use water containing trichloroethylene in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.

# Primary Standards

## Disinfection Byproducts, Disinfectant Residuals and Disinfection Byproduct Precursors

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]		Ground Water	State Project Water	Health Effects Description
<b>TTHMs</b> <b>[Total Trihalomethanes]</b>	ppb	80	NA	High Avg	32.2 27.2	84 58	Some people who use water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
<b>Halocetic Acids</b>	ppb	60	NA	High Avg	9.7 9.4	48 25	Some people who drink water containing halocetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Chloramines</b>	ppm	4	4	High Avg	2.2 0.9	2.5 2.4	Some people who use water containing chloramines well in excess of the MCL over many years could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort.
<b>DBP Precursors Control (TOC)</b>	ppm		ACC	High Avg	3.1 2.7	TT TT	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes and haloacetic acids. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects and may lead to an increased risk of cancer.

ACC: Alternative Compliance Criteria; Source water TOC <4.0mg/L, calculated quarterly as a running annual average (RAA); source alkalinity >60mg/L, calculated quarterly as RAA; and either TTHM and HAA5 RAAs < 0.4 mg/L and 0.3 mg/L, respectively.

## Key to Abbreviations

AL. . . . . Regulatory Action Level  
MCL. . . . . Maximum Contaminant Level  
PHG. . . . . Public Health Goals  
MCLG. . . . . Maximum Contaminant Level Goal  
ND . . . . . Not Detected, for Avg, ND is considered "0"  
NC. . . . . Not Collected  
NS. . . . . No Standard  
NA . . . . . Not Applicable  
umho/cm . . . Micromhos per centimeter

NTU. . . . . Nephelometric Turbidity Units  
pCi/L . . . . . PicoCuries per liter  
ppm . . . . . Parts per million or milligrams per liter  
ppb . . . . . Parts per billion or micrograms per liter  
ppt . . . . . Parts per trillion or nanograms per liter  
ppq . . . . . Parts per quadrillion or picograms per liter  
GPM . . . . . Gallons per minute  
MG . . . . . Million Gallons  
TT . . . . . Treatment Technique

## Unregulated Chemical Parameters

Unregulated--Monitoring Required

PARAMETER	UNIT	State MCL	PHG (MCLG)		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water
<b>Boron</b>	ppm	NS	AL-1000	Low High Avg	ND 2300 457	130 200 170	100 120 110	Some men who drink water containing boron in excess of the action level over many years may experience reproductive effects, based on studies in dogs.
<b>Chromium VI (Hexavalent Chromium)</b>	ppb	NS	NS	Low High Avg	ND 1.1 ND	ND ND ND	ND ND ND	n/a
<b>Perchlorate</b>	ppb	NS	AL-4	Low High Mean	ND 9.3 ND	ND ND ND	ND 6 5	Some people who drink water containing perchlorate in excess of the action level may experience effects associated with hypothyroidism. Perchlorate interferes with the production of thyroid hormones, which are required for normal pre- and postnatal development in humans, as well as normal body metabolism.
<b>Vanadium</b>	ppb	NS	AL-50	Low High Avg	ND 14.6 5.2	ND ND ND	3 3 3	The developing babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals.

Unregulated contaminant monitoring helps EPA and the California Department of Health Services to determine where certain contaminants occur and whether the contaminants need to be regulated.



# Secondary Standards

Aesthetic Standards

## Chemical Parameters

PARAMETER	UNIT	State MCL	PHG (MCLG)		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water
<b>Aluminum [AL] (e)</b>	ppb	200	600	Low High Avg	ND ND ND	ND ND ND	ND 63 ND	Residue from water treatment process; erosion of natural deposits.
<b>Color [units]</b>	Units	15	NS	Low High Avg	ND ND ND	1 3 2	3 6 5	Naturally-occurring organic materials.
<b>Corrosivity (i)</b>	Si	Non-Corrosive	NS	Low High Avg	Non-Corrosive	Non-Corrosive	Non-Corrosive	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature.
<b>Iron [Fe]</b>	ppb	300	NS	Low High Avg	ND 100 5	ND ND ND	ND ND ND	Leaching from natural deposits; industrial wastes.
<b>Methyl-tert-butyl ether [MTBE] (e)</b>	ppb	5	13	Low High Avg	ND ND ND	ND 3.1 0.7	ND ND ND	Leaking underground storage tanks; discharge from petroleum and chemical factories.
<b>Odor-Threshold (units) (j)</b>	Units	3	NS	Low High Avg	ND 2 1	(j) (j) (j)	(j) (j) (j)	Naturally-occurring organic materials.
<b>Turbidity Monthly (a)</b>	NTU	5	NS	Low High Avg	0.1 2.1 0.3	0.05 0.07 0.06	0.7 2.3 1.2	Soil runoff.
<b>Total Dissolved Solids [TDS]</b>	ppm	1000	NS	Low High Avg	450 1300 794	262 345 295	575 596 584	Runoff/leaching from natural deposits.
<b>Specific Conductance (umho/cm)</b>	umho/cm	1600	NS	Low High Avg	690 1900 1237	490 643 551	929 971 947	Substances that form ions when in water; seawater influence.
<b>Chloride [Cl]</b>	ppm	500	NS	Low High Avg	20 250 120	79 127 95	73 81 76	Runoff/leaching from natural deposits; seawater influence.
<b>Sulfate [So4]</b>	ppm	500	NS	Low High Avg	160 270 208	27 47 38	228 234 231	Runoff/leaching from natural deposits; industrial wastes.

## Additional Parameters

PARAMETER	UNIT	State MCL	PHG (MCLG)		Ground Water	State Project Water	Colorado River Water
Alkalinity [AS CaCO <sub>3</sub> ]	ppm	NS	NS	Low	150	66	125
				High	310	79	135
				Avg	239	74	132
Bicarbonate [HCO <sub>3</sub> ]	ppm	NS	NS	Low	180	NC	NC
				High	420	NC	NC
				Avg	291	NC	NC
Calcium [Ca]	ppm	NS	NS	Low	67	17	65
				High	230	24	72
				Avg	146	21	69
Magnesium [Mg]	ppm	NS	NS	Low	11	12.5	27
				High	34	16	28.5
				Avg	21	14	27.5
pH	Units ph	NS	NS	Low	7.1	8.2	8.2
				High	7.8	8.4	8.4
				Avg	7.3	8.3	8.3
Potassium [K]	ppm	NS	NS	Low	3.6	2.7	4.1
				High	40	3.6	6.0
				Avg	11.5	3.1	4.5
Total Organic Carbons (l)	ppm	NS	NS	Low	NC	1.7	2.8
				High	NC	3	3.6
				Avg	NC	2.1	3.1

## Other Additional Parameters

Sodium	ppm	NS	NS	Low	50	55	83
				High	170	80	88
				Avg	94	60	85
Hardness (Total Hardness)	ppm	NS	NS	Low	250	98	276
				High	650	120	293
				Avg	451	110	286

"Hardness" is the sum of polyvalent cations present in the water, generally Magnesium and Calcium. The cations are usually naturally-occurring.

"Sodium" refers to the salt present in the water and is generally naturally-occurring.

## ICR Disinfection By Products

PARAMETER	UNIT	State MCL	PHG (MCLG)		Ground Water	State Project Water	Colorado River Water
Chloral Hydrate	ppb	NS	NS	Low	NC	2.4	NC
				High	NC	8.2	NC
				Avg	NC	4.4	NC
Chloropicrin	ppb	NS	NS	Low	NC	ND	NC
				High	NC	1.1	NC
				Avg	NC	ND	NC
Cyanogen Chloride	ppb	NS	NS	Low	NC	2.7	NC
				High	NC	7.2	NC
				Avg	NC	4.4	NC
Haloacetonitriles	ppb	NS	NS	Low	NC	6.2	NC
				High	NC	13	NC
				Avg	NC	8.7	NC
Haloketones	ppb	NS	NS	Low	NC	0.6	NC
				High	NC	2.9	NC
				Avg	NC	1.5	NC
Total Organic Halides	ppb	NS	NS	Low	NC	166	NC
				High	NC	250	NC
				Avg	NC	194	NC

## ICR Microbial Contaminants

Heterotrophic Plate Count (k)	CFU/mL	NS	NS	Low	NC	<1	NC
				High	NC	<1	NC
				Avg	NC	<1	NC

## Footnotes

- Corrosivity is measured by the Langlier Stability Index. A positive index, indicating non-corrosivity, was maintained.
- Metropolitan has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For information contact MWD.
- Pour plate technique, 48-hour incubation at 35 degrees C, monthly mean value.
- Total Organic Carbons at the MWD filtration plants were taken at the filter effluents.

## General Water Quality Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottle water that provide the same protection for public health.

persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from Safe Drinking Water Hotline (1-800-426-4791).

## Source Water Assessment

An assessment of the drinking water sources for Corona, Coronita, El Cerrito and Green River was completed in December of 2002. A copy of the assessment is available at the Corona Department of Water & Power

customer counter. You may request a summary of the assessment be sent to you by contacting the CDWP office at (909) 736-2263.



For general information about this report please call (909) 736-2263.

For questions related to water quality, please contact the Water Production & Distribution Division at (909) 736-2478.

If you are interested in participating in decisions that affect the quality and supply of the water in the City of Corona, you can attend the regular City Council meetings on the first and third Wednesday of every month.

**-Español-** Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo o hable con alguien que lo entienda bien.





## ***City of Corona***

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